

# VPP Porcelain Press

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Achieving a safe and healthful workplace requires the active participation of all staff. Each individual can make a difference, so remember—**You Make It Happen!** In this issue, the VPP Steering Committee is highlighting instances where alert and committed staff have dealt with safety issues in the workplace, and share the lessons they have learned.

## Watch Your Back!

Back injuries are considered the nation's most prevalent workplace safety problem. The majority of back injuries can be attributed to improper lifting techniques.

Janice Haney—janitor, union steward, and VPP Steering Committee member—stresses the **importance of good lifting techniques**, especially on the job. The janitorial staff is constantly lifting boxes of cleaning products and supplies or other heavy objects during their day-to-day tasks.

"In our job, we are bending and lifting constantly," says Haney. "We want to **prevent any injuries by training and informing our staff.**" (3C209)

The Hanford Environmental Health Foundation was brought in to train janitorial staff on proper lifting techniques. "By educating our staff, we are preventing injuries from happening," Haney said.

Keeping this in mind, we should not only be careful at work, but we should practice proper lifting techniques at home, too. Here are some lifting tips:

- Before lifting, **consider the object weight, shape, size, and vertical distance** of the lift.
- **Plan** the lift through (route, obstacles, and doors).
- When lifting, **keep feet shoulder-width apart.**
- **Bend your knees and tighten your stomach muscles**, letting your leg muscles do the work.
- Securely **grip the load** and **keep the load close to your body.**
- **Lift slowly and evenly**, avoiding rapid, jerky movements.(3L348)
- **Avoid simultaneous lifting and twisting.**

The Porcelain Press is sponsored by the PNNL VPP Steering Committee. It is distributed both electronically and in PNNL building restrooms. Three payroll numbers are included in this newsletter. If you see yours listed, please call 376-4088. You just won a safety prize!

## Don't Get Caught Cold with Liquid Nitrogen!

Mike Tinker, a science and engineering associate, was recently reminded of the dangers associated with a product he has been using for more than 12 years. Liquid nitrogen, (LN) used mainly for the rapid cooling of any number of chemicals or equipment, has a reputation of being fun and easy to work with.

The reputation of this chemical makes it seem benign, and when a staff member uses a product regularly, it's easy to forget the everyday necessary precautions.

**Routine use of products like liquid nitrogen can quickly turn into a dangerous or undesirable situation.** Mike discovered this while filling a portable liquid nitrogen container. The nitrogen, vented from the holding tank, was so cold that it froze open the valve used to stop the flow of nitrogen from the holding tank.

Luckily for Mike, a secondary valve was recently installed, allowing him to safely and quickly turn off the tank. Without the secondary shutoff valve, LN at a temperature of  $-160^{\circ}\text{C}$  would have continued to spray everywhere!

This incident should remind us to always **be knowledgeable of the safety risks** associated with working with all chemicals. (3A110)

Other tips when working with liquid nitrogen are as follows:

- **Use loose-fitting leather gloves.**
- **Cover all exposed areas** of the body.
- **Wear footwear that fully covers the foot.**
- **Wear goggles** or a face shield.

Contact with liquid nitrogen or surfaces that have been in contact with liquid nitrogen can cause frostbite and cold burns. In addition, displacement of oxygen with nitrogen in the atmosphere can result in asphyxiation.